UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,520	09/27/2001	William S. Schaller	53921/157	1219

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EXAMINER
HOM, SHICK C

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/963,520	SCHALLER ET AL.
		Examiner	Art Unit
		Shick C. Hom	2666

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1:704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>9/27/01 & 6/21/05</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-23</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-6 and 19-23</u> is/are rejected.

7) ☒ Claim(s) <u>7-18</u> is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892).

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Drawings

1.   The drawings are objected to because a brief descriptive

label must be provided for each numbered items, e.g. in Fig. 1

devices 12a-c, switches 110a-c, etc. Corrected drawing sheets

in compliance with 37 CFR 1.121(d) are required in reply to the

Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the

figures appearing on the immediate prior version of the sheet,

even if only one figure is being amended. The figure or figure

number of an amended drawing should not be labeled as "amended."

If a drawing figure is to be canceled, the appropriate figure

must be removed from the replacement sheet, and where necessary,

the remaining figures must be renumbered and appropriate changes

made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be

necessary to show the renumbering of the remaining figures. Each

drawing sheet submitted after the filing date of an application

must be labeled in the top margin as either "Replacement Sheet"

or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

not accepted by the examiner, the applicant will be notified and

informed of any required corrective action in the next Office

action. The objection to the drawings will not be held in
abeyance.

Specification

2.   The lengthy specification has not been checked to the
extent necessary to determine the presence of all possible minor
errors. Applicant's cooperation is requested in correcting any
errors of which applicant may become aware in the specification.

Claim Objections

3.   Claims 2, 4-18, and 22-23 are objected to because of the
following informalities: In claims 2, 4-18 lines 1-2 delete "A
method of selecting a routing datapath between an active
datapath and a redundant datapath for a communication device"
and insert ---The method of selecting the routing datapath
between the active datapath and the redundant datapath for the
communication device ---. Likewise, in claims 22-23 line 1
delete "A switch--- and insert ---The switch---. In claim 22
line 5 delete typo "and and" and insert ---and---. Appropriate
correction is required.

Claim Rejections - 35 USC § 112

4.   Claims 2 and 20 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point

out and distinctly claim the subject matter which applicant

regards as the invention.

In claim 2 lines 3, 4 which recite "said step (i)" and

"said step (ii)" lack clear antecedent basis because no step (i)

and step (ii) have been previously recited in the claims and

therefore the limitation is not clearly understood.   In claim 20

line 9, which recite "said fault detection system" lacks clear

antecedent basis.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs

of 35 U.S.C. 102 that form the basis for the rejections under

this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published
> under section 122(b), by another filed in the United States before the
> invention by the applicant for patent or (2) a patent granted on an
> application for patent by another filed in the United States before the
> invention by the applicant for patent, except that an international
> application filed under the treaty defined in section 351(a) shall have the
> effects for purposes of this subsection of an application filed in the
> United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English
> language.

6.   Claims 1-4, and 20-21 are rejected under 35 U.S.C. 102(e)

as being anticipated by Senevirathne et al. (6,798,740).

Regarding claims 1-4 and 20-21:

Senevirathne et al. disclose a method of selecting a
routing datapath between an active datapath and a redundant
datapath for a communication device (see abstract which recite
the method and apparatus for selecting between the primary
switching fabric in an ATM network and the redundant
communication line on the protection switching fabric), said
method compnsing: (i) Monitoring for a fault occurring in said
active datapath and said redundant datapath (see col. 1 lines
20-25 which recite the invention being related to monitoring
error and to a decision process for switching to the redundant
portions of the switching fabric and network and col. 3 lines
57-63 which recite monitoring both the primary and the
protection paths); (ii) Upon detection of said fault, evaluating
severity of said fault against a threshold; and if said seventy
of said fault exceeds said threshold: (ii.1) If said fault is
associated with said active datapath, switching said routing
datapath from said active datapath to said redundant datapath
(see col. 6 lines 1-10 which recite monitoring the total number
of errors so that if the total number of errors for a
communication link exceeds a specified number then switching to
the protection path); and (ii.2) If said fault is associated

with said redundant datapath, updating a health score associated

with said redundant datapath with a score relating to said fault

(see abstract, col. 6 lines 1-10, and col. 9 lines 22-40 which

recite monitoring errors for all 72 data input line sources,

i.e. the 36 primary and the 36 redundant lines, and updating or

incrementing the error-counter when an error is found clearly

anticipate the detecting fault associated with the redundant

datapath and updating a health score associated with the

redundant datapath).

Regarding claim 2:

Senevirathne et al. disclose wherein said step (i)

comprises determining if said fault is a first fault for said

active datapath; and for said step (ii) if said fault is said

first fault, setting said severity above said threshold (see

col. 3 line 64 to col. 4 line 6 which recite although difficult

it is possible that one glitch or error can prompt switching to

the protection path).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically
disclosed or described as set forth in section 102 of this title, if the
differences between the subject matter sought to be patented and the prior
art are such that the subject matter as a whole would have been obvious at
the time the invention was made to a person having ordinary skill in the
art to which said subject matter pertains. Patentability shall not be
negatived by the manner in which the invention was made.

8.   This application currently names joint inventors.   In

considering patentability of the claims under 35 U.S.C. 103(a),

the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered

therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to

point out the inventor and invention dates of each claim that

was not commonly owned at the time a later invention was made in

order for the examiner to consider the applicability of 35

U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior

art under 35 U.S.C. 103(a).

9.   Claims 5-6, 19, and 22-23 are rejected under 35 U.S.C.

103(a) as being unpatentable over Senevirathne et al.

(6,798,740) in view of Ferrell et al. (4,517,639).

    For claims 5-6, 19, and 22-23, Senevirathne et al. disclose

the switch and method described in paragraph 6 of this office

action.   Senevirathne et al. disclose all the subject matter of

the claimed invention with the exception of receiving said first

fault report from a first monitoring module and updating a first

fault report for said active datapath; receiving said second

fault report from said second monitoring module and updating a

second fault report for said redundant datapath; and generating

a companson value of said first and second fault reports to

identify which of said active and redundant datapaths has a

better health as in claims 5, 22, 23, wherein earlier faults are

cleared; and said First and second fault reports are updated to

remove said earlier faults as in claim 6; and selecting said

routing datapath according to the evaluation as in claim 19.

Ferrell et al. from the same or similar fields of endeavor

teach that it is known to provide Receiving said first fault

report from a first monitoring module and updating a first fault

report for said active datapath; receiving said second fault

report from said second monitoring module and updating a second

fault report for said redundant datapath; and generating a

companson value of said first and second fault reports to

identify which of said active and redundant datapaths has a

better health (see col. 2 lines 14-34 which recite generating

the comparative health of the units for the monitored redundant

system based on the fault scoring); wherein earlier faults are

cleared; and said First and second fault reports are updated to

remove said earlier faults (see abstract which recite the fault

scores in memeory beind cleared whenever all modules have scored

a fault condition of equal weight); and selecting said routing

datapath according to the evaluation (see abstract, col. 1 line

66 to col. 2 line 11, and col. 2 lines 35-51, which recite

selection being based upon the lowest fault score including

selecting the units having recoved from a trasient failure).

Thus, it would have been obvious to the person having ordinary

skill in the art at the time the invention was made to provide

the step of receiving said first fault report from a first

monitoring module and updating a first fault report for said

active datapath; receiving said second fault report from said

second monitoring module and updating a second fault report for

said redundant datapath; and generating a companson value of

said first and second fault reports to identify which of said

active and redundant datapaths has a better health; wherein

earlier faults are cleared and said First and second fault

reports are updated to remove said earlier faults; and selecting

said routing datapath according to the evaluation as taught by

Ferrell et al. in the communications switch and method of

Senevirathne et al. The step of receiving said first fault

report from a first monitoring module and updating a first fault

report for said active datapath; receiving said second fault

report from said second monitoring module and updating a second

fault report for said redundant datapath; and generating a

companson value of said first and second fault reports to

identify which of said active and redundant datapaths has a

better health; wherein earlier faults are cleared and said

First and second fault reports are updated to remove said

earlier faults; and selecting said routing datapath according to

the evaluation can be implemented by connecting the fault

scoring and selection circuit and method for redundant system of

Ferrell et al. to the switch and method of Senevirathne et al.

The motivation for using the fault scoring and selection circuit

and method for redundant system as taught by Ferrell et al. in

the communication switch and method of Senevirathne et al. being

that it provides more reliability for the system since the

system can bring back on line units that have recovered from

transient failure so that the system is better able to respond

to future equipment failures.

Allowable Subject Matter

10. Claims 7-18 would be allowable if rewritten to overcome the

objection(s), set forth in this Office action and to include all

of the limitations of the base claim and any intervening claims.

Conclusion

11.   The prior art made of record and not relied upon is

considered pertinent to applicant's disclosure.

McKee et al. disclose a method and apparatus for testing a

packet-based network.

Cornell discloses restoration method for multiplexed circuits.

12.   Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Shick C.

Hom whose telephone number is 571-272-3173. The examiner can

normally be reached on Monday to Friday with alternate Fridays

off.

    If attempts to reach the examiner by telephone are

unsuccessful, the examiner's supervisor, Seema Rao can be

reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is

571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH

DANG TON
PRIMARY EXAMINER